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## EUROPEAN PATENT APPLICATION

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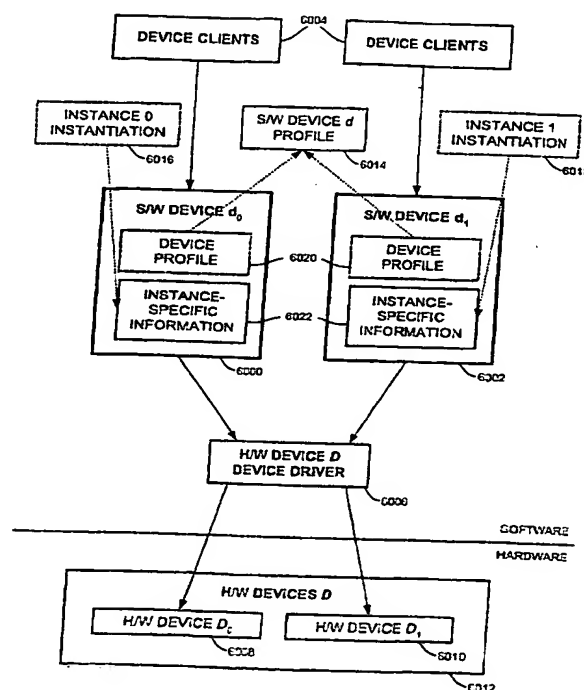
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### (54) Method and apparatus for a receiver/decoder

(57) A method and apparatus relating to a receiver/decoder in a digital television environment, including logical devices (including logical demultiplexer devices) for representing physical and other devices in the receiver/decoder. The method includes the instantiation of devices by the receiver/decoder as required to support functionality thereof. The method further includes the use of multiple demultiplexers/remultiplexers, for example in the recording of more than one service simultaneously; and a control word device for the management of control word operations; the use of two or more tuners.

Various elements of a digital television system (such as a receiver/decoder and a set top box) are also disclosed.

Fig. 9



EP 1 304 871 A3



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# EUROPEAN SEARCH REPORT

Application Number  
EP 02 25 3866

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X,D	EP 0 935 382 A (CANAL PLUS SA) 11 August 1999 (1999-08-11) * column 15, line 30 - column 22, line 34 * -----	1-6	H04N5/00 H04N7/24 H04N7/167
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H04N
<del>The present search report has been drawn up for all claims</del>			
Place of search MUNICH		Date of completion of the search 29 January 2003	Examiner Guettlich, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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European Patent  
Office

Application Number

EP 02 25 3866

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-6



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**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
EP 02 25 3866

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

**1. Claims: 1-6**

Logical device for a receiver/decoder

**2. Claims: 7-18**

Apparatus having a function description and providing a value in accordance with the function description to a process of a receiver/decoder.

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 02 25 3866

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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29-01-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0935382	A	11-08-1999	
		EP 0935382 A1	11-08-1999
		AU 2181599 A	23-08-1999
		BR 9909594 A	19-12-2000
		CA 2318247 A1	12-08-1999
		CN 1295756 T	16-05-2001
		EP 1053633 A1	22-11-2000
		HR 20000483 A1	31-12-2000
		HU 0101083 A2	30-07-2001
		WO 9940719 A1	12-08-1999
		JP 2002503063 T	29-01-2002
		NO 20003924 A	04-10-2000
		PL 342221 A1	21-05-2001
		TR 200002263 T2	21-12-2000
		ZA 9900827 A	30-09-1999

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82